

New Source Review Implications of the PM2.5 Ambient Air Quality Standards

Alaska Department of Environmental Conservation

Air Permits Program

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The Alaska Department of Environmental Conservation (ADEC) is proposing to adopt the National Ambient Air Quality Standards (NAAQS) for particulate matter with an aerodynamic diameter of less than 2.5 microns (PM2.5). *What ramifications will the PM2.5 standards have on air quality permitting within the State of Alaska?*

Short Answer:

ADEC intends to use the U.S. Environmental Protection Agency's (EPA's) "1997 Interim PM-10 Surrogate Policy" for new source review (NSR) permitting, until an actual PM2.5 NSR program is developed for the State of Alaska.

Additional Information

Background: On October 22, 2008, EPA published a finding that Alaska had not "submitted a complete State Implementation Plan (SIP) that provides the basic program elements specified in section 110(a)(2) of the Clean Air Act (CAA or Act) necessary to implement the 1997 Fine Particulate Matter (PM2.5) National Ambient Air Quality Standards (NAAQS)." The finding of failure to submit established "a 24-month deadline for EPA to promulgate a Federal Implementation Plan (FIP) to address the outstanding SIP elements unless, prior to that time, the affected states submit, and EPA approves, the required SIPs. The findings that all, or portions of a state's SIP submission, are complete establish a 12-month deadline for EPA to take action upon the complete SIP elements in accordance with the CAA."

ADEC's Strategy for Resolving the SIP Deficiency: ADEC is proposing to adopt the PM2.5 NAAQS issued on October 17, 2006 to help rectify this finding. In order to meet the deadline established in the October 22, 2008 notice, ADEC needs to have the PM2.5 standard in place as soon as possible in order to address both the 1997 and 2006 standard revisions. The public notice information can be found on the following page:

<http://www.dec.state.ak.us/air/ap/calendar.htm>. The public comment period closes on September 25, 2009, at 5 p.m. There is a public hearing scheduled for September 23, 2009, in Conference Room A, at the ADEC Bayview Office Building, Suite 249, 619 E. Ship Creek Drive, in Anchorage, Alaska.

ADEC intends to promulgate additional regulations in the near future to establish the NSR requirements for PM2.5 emitting sources. ADEC will likely propose regulations that mimic the current/pending federal NSR requirements.

What Is The PM10 Surrogate Policy?

Under the 1997 Interim PM10 Surrogate Policy, compliance with the PM10 NSR provisions is adequate for demonstrating compliance with the PM2.5 NAAQS.

Why Would ADEC Use the PM10 Surrogate Policy?

EPA is still in the process of developing a comprehensive NSR program for PM2.5 emitting sources. While EPA has developed *some* elements of the program, there are still several critical components that are under development. The missing elements include the significant impact levels (SILs) used to determine when a source is *not* causing or contributing to a violation of the ambient air quality standard, and the significant monitoring concentrations used to determine when ambient air monitoring is unwarranted. Without these elements, permit applicants and ADEC could be forced into expending large resources with no air quality benefits.

ADEC does not have the resources to develop these missing elements on its own. Therefore, ADEC's only option is to rely on the PM10 Surrogate Policy until such time that EPA has developed a comprehensive program. When that occurs, ADEC will be able to adopt EPA's program, or modify it as necessary to meet Alaska's needs.

Additional Issues – Air Quality Monitoring:

ADEC intends to update the Alaska Quality Assurance Manual for Ambient Air Quality Monitoring to include requirements for the PM2.5 NAAQS data collection and monitoring. ADEC is currently preparing the manual for EPA review and approval, and intends to adopt the manual by reference upon approval. Dan Fremgen is the ADEC staff contact for the project and can be reached at 907-465-5111 or daniel.fremgen@alaska.gov.

Summary of ADEC's Strategy:

- Adopt PM2.5 NAAQS
- Update the Alaska Quality Assurance Manual for Ambient Air Quality Monitoring to include requirements for PM2.5 monitoring
- Adopt NSR provisions for PM2.5 emitting sources
- Submit for EPA approval the above elements as a revision to the SIP